

REMARKS

Claims 1-13 and 21-34 are pending in this application. By this Amendment, claims 3, 7, 8, 9 and 11 are amended. Claims 14-20 are canceled without prejudice to, or disclaimer of, the subject matter contained in those claims. Claims 21-34 are added. These new claims introduce no new matter. Replacement drawing sheets are included because Applicants are concerned that those originally filed with the Application may not have been clear enough to reproduce neatly. Reconsideration based on the above amendments and the following remarks is respectfully requested.

Applicants appreciate the courtesies shown to Applicants' representative by Examiners Mallari and Nasser in the June 15, 2004 personal interview. Applicants' separate record of the substance of the interview is incorporated into the following remarks.

The Office Action, on page 2, objects to claims 3, 7, 8 and 9 for certain informalities. Claims 3, 7, 8 and 9 are amended to obviate these objections. Withdrawal of the objections to claims 3, 7, 8 and 9 is respectfully requested.

The Office Action, on page 2, objects to claims 14-20 as being of improper dependent form for failing to further limit the subject matter of a previous claim. Claims 14-20 are canceled. Claims 21-34 are added to cover at least the subject matter contained in canceled claims 14-20 in independent form. As such, the objection to claims 14-20 is obviated. Withdrawal of the objection is respectfully requested.

The Office Action, on page 3, rejects claims 3-20 under 35 U.S.C. §112, second paragraph, as being indefinite. Specifically, claims 3 and 9 are asserted to recite limitations lacking antecedent basis. Claims 3 and 9 are amended to obviate the rejection. Claims 14-20 are canceled. Reconsideration and withdrawal of the rejection of claims 3-13 under 35 U.S.C. §112, second paragraph, as being indefinite are respectfully requested.

The Office Action, on page 4, rejects claims 1-5, 10, 11 and 14-20 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,248,078 to Risby et al. (hereinafter "Risby"). This rejection is respectfully traversed.

Risby teaches test systems and methods for detecting a hepatic disorder in a mammal and especially a primate (Abstract). Specifically, Risby teaches a chamber for receiving respiratory gas from the mammal; and a monitor for detecting at least one volatile organic molecule in the respiratory gas and for outputting the concentration of at least one of the detected organic molecules to an apparatus or to an operator as a display (col. 3, lines 34-40). The Office Action specifically states that "Risby fails to specify quantifying isopropanol." The Office Action goes on to assert that the Applicants' Specification allegedly discloses that quantification of isopropanol includes quantifying its decomposition products, and then asserts that both carbon monoxide and carbon dioxide are decomposition products of isopropanol, citing a separate reference for proof of this conclusion.

Applicants respectfully submit that what Applicants' Specification actually states is:

Depending on the method of analysis, isopropanol and cyanides can be detected and quantified as a decomposition product or a reaction product. For example, cyanides may be quantified as a decomposition product such as HCN or the like. Isopropanol may be quantified as a decomposition product or a reaction product such as $\text{CH}_3\text{C}^+\text{HCH}_3$, $\text{CH}_3\text{C}^+\text{HOH}$, $(\text{CH}_3\text{CH}(\text{OH})\text{CH}_3)_2\cdot\text{H}_2$ or the like. Therefore, in this Specification, the word "quantifying isopropanol and/or cyanides" also means quantification of isopropanol and/or cyanides performed indirectly by quantifying these decomposition products and reaction products.

See Specification, page 6, lines 16-26.

Namely then, Applicants respectfully submit that "quantification of isopropanol" includes, in addition to direct quantification of isopropanol, not "quantifying its decomposition products" as is stated on page 4 of the Office Action, but "quantification of isopropanol performed indirectly by quantifying these decomposition products." For reference, "these decomposition products" are not only CO and CO₂, as enumerated in the

Office Action, but various compounds as shown above. A total amount of isopropanol, including those converted to the above decomposition products by decomposition, during a quantifying process, are used for testing for hepatic diseases.

Risby, at best, only arguably indicates quantification of elements which may happen to be among the decomposition products of isopropanol. Risby does not teach or suggest that such quantifications are converted to a quantification of isopropanol itself.

Furthermore, although the claims do not require that all decomposition products of isopropanol be quantified, Applicants note that quantifying only CO and CO₂, as in Risby, would not be expected to yield a reliable indication of the quantity of isopropanol present.

For at least these reasons, Applicants respectfully submit that claims 1-5, 10 and 11, and the subject matter of claims 14-20, now recited in independent form in claims 21-34, are not anticipated by Risby. Further, Applicants respectfully submit, with reference to MPEP §2131, that the standard for anticipation, and therefore rejection of a claim or claims under 35 U.S.C. §102, is met "only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference." Additionally, "[t]he identical invention must be shown in as complete detail as is contained in the ... claim." Applicants thus respectfully submit that a rejection under 35 U.S.C. §102(e) fails when it is based on a statement that the applied reference "fails to specify" a feature specifically recited in that claim, seeking additional explanation by attempting to combine language from Applicants' Specification and yet another reference document.

Accordingly, reconsideration and withdrawal of the rejection of claims 1-5, 10 and 11 under 35 U.S.C. §102(e) as being anticipated by Risby are respectfully requested.

The Office Action, on page 5, rejects claims 1-5, 10, 11 and 14-20 under 35 U.S.C. §103(a) is being unpatentable over Risby in view of U.S. Patent No. 5,087,786 to Nubel et al. (hereinafter "Nubel"). This rejection is respectfully traversed.

As noted above, Risby discloses an apparatus for testing for hepatic diseases. The Office Action recognizes again that Risby fails to mention specifically isopropanol as a volatile organic compound relying instead on the teachings of Nubel for showing that isopropanol is a volatile organic compound. The Office Action concludes that it would have been obvious to one of ordinary skill in the art to use isopropanol as the volatile organic compound in the apparatus of Risby based on the teachings of Nubel.

As discussed above, Risby fails to teach or suggest quantifying isopropanol. Nubel fails to overcome this deficiency. For at least this reason, Applicants respectfully submit that the subject matter of claims 1-5, 10, 11 and 14-20, the latter of which is now recited in claims 21-31, are not suggested by the combination of the applied references nor would they have been obvious to one of ordinary skill in the art based on the combination of those applied references.

Additionally, Nubel teaches a process for the halogen-assisted conversion of lower alkanes to higher molecular weight hydrocarbons (Abstract). Differently stated, Nubel seeks to solve the problem of converting relatively volatile natural gas to liquid products (even to a stable gel) facilitating the transport of low molecular weight hydrocarbons, i.e., natural gas, from remote areas (col. 1, lines 29-45).

Applicants respectfully submit, with reference to MPEP §2141.01(a) that "[i]n order to rely on a reference as a basis for a rejection of an applicant's invention, the reference must either be in the field of the applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." Applicants respectfully submit that combining a reference concerned with making natural gasses into liquid products for ease of transportation with an apparatus for testing for hepatic diseases does not reasonably meet the standard set forth above.

Additionally, Applicants respectfully submit that regardless of whether there was motivation to combine Risby and Nubel, the specific recitation of isopropanol and cyanides in independent claims 1, 3 and 21 were selected from among numerous compounds having apparently high relation to hepatic diseases. The mere mention in Nubel that isopropanol is one of more than two dozen useful/suitable volatile organic compounds for use in the methods taught in that patent, to a clearly different purpose in a clearly different field of endeavor, is not enough to show motivation to one of ordinary skill in the art such that the combination of the applied references can be deemed to have suggested the combination of features recited in the enumerated claims.

Accordingly, reconsideration and withdrawal of the rejection of claims 1, 5, 10 and 11 under 35 U.S.C. §103(a) as being unpatentable over the combination of the applied references are respectfully requested.

The Office Action, on page 6, rejects claims 6-9, 12 and 13 under 35 U.S.C. §103(a) as being unpatentable over Risby in view of U.S. Patent No. 5,573,005 to Ueda et al. (hereinafter "Ueda"). This rejection is respectfully traversed.

Ueda discloses generally an expiration collecting method which can automatically collect expiration and guide the same to an analyzer through a simple operation while preventing a collection error, and an apparatus for implementing this method (col. 1, lines 63-67). Ueda does not discuss a method or apparatus for quantifying isopropanol and/or cyanides in breath. For at least this reason, Ueda does not overcome the shortfall in the application of Risby to independent claim 3. Claims 6-9, 12 and 13, while reciting separately patentable subject matter, include all of the features of independent claim 3 from which they depend. Therefore, Applicants respectfully submit that the combination of features recited in these claims would not have been rendered obvious over the combination of the applied references.

Accordingly, reconsideration and withdrawal of the rejection of claims 6-9, 12 and 13 under 35 U.S.C. §103(a) as being unpatentable over the combination of the applied references are respectfully requested.

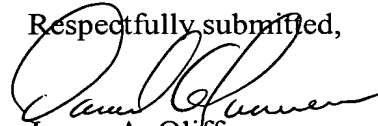
Applicants' representative presented the above arguments to Examiners Mallari and Nasser during the June 15 personal interview. The Examiners agreed that the rejection under 35 U.S.C. §102(e) was "improper." Further, the Examiners agreed that, provided that the Applicants give written argument as to the specific application of isopropanol and/or cyanides, the rejection under 35 U.S.C. §103(a) would "be removed." Applicants respectfully submit that such argument is included in the first paragraph on page 11 of this Amendment.

New claims 32-34 are allowable at least for their dependence on allowable base claims.

In view of the foregoing, Applicants respectfully submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-13 and 21-34 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number set forth below.

Respectfully submitted,



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Attachments:

Replacement Drawing Sheets (Figs. 1-5)

JAO:DAT/tlp

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